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**JP08234176A**

**HIGH POLYMER-LIQUID CRYSTAL COMBINED DISPLAY ELEMENT**

**FUJI XEROX CO LTD**

**Inventor(s) : KAKINUMA TAKEO ; ITO KENSUKE ; KOSHIMIZU MINORU**

**Application No. 07060059, Filed 19950224, Published 19960913**

**Abstract:** PURPOSE: To obtain a high polymer-liquid crystal combined display element which has high resolution and high contrast and is usable in a bright place as well.

CONSTITUTION: A photoconductive layer 7, a light shielding layer 8, a reflection layer 9 and a high polymer-liquid crystal combined layer 10 are successively formed between transparent electrodes 6 and 11. The other surface of the one transparent electrode 6 is provided with a light emitting layer 3 held by transparent row electrodes 4 and column electrodes 2 via a transparent solid layer 5. The light from the regions where the light emitting layer 3 emits light is made incident on the photoconductive layer 7, by which the photoconductive layer 7 is exposed in correspondence to the light emission patterns of the light emitting layer 3. The voltage above the threshold is impressed in the regions corresponding to the exposing patterns of the photoconductive layer 7 in the high polymer-liquid crystal combined layer 10 between the transparent electrodes 6 and 11 and, therefore, the orientation of the liquid crystals is eventually generated.

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**OPTICAL ELEMENT AND DISPLAY PLATE**  
TORAY IND INC

**Inventor(s):** ; YOSHIOKA MASAHIRO ; TAKEDA MASAAKI  
**Application No.** 05178189, **Filed** 19930719, **Published** 19950207

**Abstract:** PURPOSE: To provide an optical element formed by utilizing assemblies of fibers as two sheets of sheet-like materials and the display plate of a transmission type or reflection type arranged therewith.

CONSTITUTION: This optical element 8 consists of two sheets of the sheet-like materials and has the structure in which at least one sheet thereof is a driving part and is fixed to a fixing part 3 of plural band-shaped electrodes 2 and an insulator 4. The optical element is driven by the electrostatic attraction and repulsion force generated between the driving part and the fixing part when a voltage is impressed to the band-shaped electrodes 2. The sheet-like materials constituting the driving part are the assemblies of the fibers. The display element is constituted by arranging a plurality of these optical elements. The constitution is simple and the thin film-like flexible optical elements having a memory characteristic are obtd. The sheet-like flexible display plate which is formable to a large size and is bendable and roundable is obtd. An effect like that of ground glass is obtd.

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